

REMARKS

This is in response to the Office Action mailed on September 12, 2008. Claims 1-3, 5, 6, 9, 11-22, 25-29, 31, 32, 34-36 and 38 were pending in that action. All claims were rejected. With the present response, claim 1 is amended and claims 9, 27-29, 31-36 and 38 are cancelled. The remaining claims are unchanged.

It is respectfully pointed out that, other than claim cancellations, the only amendment proposed herewith is a relocation of the elements of dependent claim 9 into the corresponding independent claim 1. Accordingly, these issues have already been considered by the Examiner. Therefore, entry of Applicant's after final is appropriate and respectfully requested.

Beginning on page 2 of the Office Action, the Examiner rejected claims 27-29, 31, 32, 34-36 and 38 under 35 U.S.C. §101 for allegedly being directed to non-statutory subject matter. With the present response, these claims have been cancelled. In the interest of simplifying the range of issues under consideration. Applicant reserves the right to re-assert such claims, for example, in a continuation case or with an RCE.

Beginning on page 4 of the Office Action, the Examiner rejected claims 1-3, 5, 6, 11, 12, 18-20, 22, 25-29, 31, 32, 34-36 and 38 under 35 U.S.C. §102(b) as being anticipated by an article attributed to Masuichi (hereinafter referred to as "the Masuichi reference"). Beginning on page 16 of the Office Action, the Examiner rejected claims 13-17 under 35 U.S.C. §103(a) as being unpatentable over the Masuichi reference in view of an article attributed to Yu. For reasons discussed in detail below, it is respectfully submitted that the pending claims, as amended, are patentably distinguishable over the Masuichi and Yu references considered individually or in combination.

With the present response, Applicant has amended independent claim 1 such that it now includes the features of its dependent claim 9. Claim 9 has been cancelled to accommodate this change. Notably, the Examiner does not specifically reject claim 9 in the latest Office Action. It is respectfully submitted that, in fact, claim 9 includes patentable subject matter. A rationale for this conclusion will now be provided.

Independent claim 1 is limited to selecting instances from unlabeled data that are uncertain with respect to a first classifier. This selection process is further limited to selecting instances from the unlabeled data as a function of uncertainty. Still further, the function of uncertainty is limited to calculating a value of uncertainty and comparing the value to a predetermined threshold. With the amendments made with the present response, the step of selecting instances from the unlabeled data is even more specifically limited to selecting instances where the value of uncertainty is “below the predetermined threshold.”

Accordingly, the claim selection of instances from the unlabeled data that are uncertain with respect to the first classifier is limited to being a process that involves a selection of instances where the first classifier confidence is low. When addressing the claim element of evaluating confidence relative to a predetermined threshold, the Examiner points to a description in the Masuichi reference of a selection of the “ten most reliable mutual proximity pairs” in relation to a calculation based on a cosine between two vectors. This is fundamentally different than the claimed selection of instances from unlabeled data that are uncertain with respect to a first classifier. In fact, the passages cited by the Examiner recite an opposite effect as compared to the claim step. The reference describes applying a threshold of sorts in order to select most reliable data. In contrast, the claim requires a selection of instances where a value of uncertain falls below a predetermined threshold. The claim recites selecting uncertain data where classification relative to the first classifier is low. This is in distinct contrast to the passages cited by the Examiner.

Further, it is also worth paying attention to what happens in claim 1 to the selected instances from the unlabeled data that are uncertain with respect to the first classifier. The claim goes on to recite labeling those instances using the second classifier to form a first labeled set. The “ten most reliable mutual proximity pairs” identified by the Examiner as being the selected instances are never in any way in the Masuichi reference labeled utilizing a second classifier as claimed. Indeed, there would seem to be no reason to label data that is already calculated to be reliable. In fact, the proximity pairs of Masuichi are not even unlabeled data in a technical sense.

It is again pointed out that the Examiner did not provide a specific rejection of claim 9. Should the Examiner decide to now reject claim 9 (in the form of a rejection of claim 1, which now

incorporates the elements of claim 9), then Applicant respectfully requests a new Office Action in order to have the opportunity to respond to such a rejection. However, it is respectfully submitted that the incorporation of the elements of claim 9 into independent claim 1, for the reasons discussed above, place claim 1 in condition for allowance.

Dependent claims 2-6 and 11-21 are dependent upon independent claim 1 and are believed to be in allowable form at least for the same reasons discussed above in relation to their affiliated independent claim. Further, it is respectfully submitted that some or all of these dependent claims are allowable based on the merit of their own limitations. Further, it is respectfully submitted that the addition of the cited Yu reference in order to reject claims 13-17 does not remedy the failure of the cited Masuichi reference to teach or suggest the elements of claim 1 as amended. For all of the reasons discussed above, it is respectfully submitted that claims 1-6 and 11-21 are in condition for allowance.

Independent claim 22 is similar to independent claim 1 in that it includes generating unlabeled data by selecting instances that are determined to be uncertain relative to a first and second classifier. In response to these claim elements, the Examiner points to an evaluation of a cosine value described in the Masuichi reference. In accordance with the teachings of the Masuichi reference, the selections of data based on the cosine value are made in accordance with the goal of maximizing the cosine value. Notably, this means choosing data that is certain rather than uncertain. For at least this reason, it is respectfully submitted that independent claim 22 is in allowable form. Dependent claims 25 and 26 are dependent upon independent claim 22 and are believed to be in allowable form at least for the same reasons discussed in relation to their affiliated independent claim.

In summary, it is respectfully submitted that claims 1-6, 11-22, 25 and 26 are in condition for allowance. Consideration and favorable action are respectfully solicited. The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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